

A B S T R A C T

A method for utilizing a Spanning Tree Protocol (STP) in an Ethernet network wherein a number of VLANs are defined and a plurality of Ethernet switching nodes (A, B, C D E, F,G H) are interconnected via their ports (A1,...,H4) so that each of the ports is initially assigned to one or more VLANs, and each of the VLANs is intended to enable traffic between two or more edge ports (D3, B3). The method comprises a so-called pruning procedure initiated upon establishing a new STP topology (30) related to one or more VLANs. This procedure concerns a broadcast domain of at least one of the VLANs and is aimed at obtaining a sub-tree for each pruned VLAN in the new STP topology. The sub-tree is usually shrunk, bound by the edge ports assigned to the corresponding pruned VLAN, and thus eliminates broadcast traffic of the pruned VLAN to any Ethernet switch extending beyond the obtained sub-tree.